

# World Resources Company

Form: FM-M01

## RECYCLABLE MATERIAL PROFILE

**EXHIBIT A**

Generator Name: Alaskan Copper Works

Company I.D. #: 22149-001-01

### A. Generator Information

1. Address: 3200 Sixth Avenue South

3. Material EPA Waste Code: F006

Seattle

4. Generator's EPA I.D. Number: WAD980738546

WA

98124

2. Contact: Gerald Thompson

5. Generator's State I.D. Number:

Title: Environmental Assistant

### B. Recyclable Material Characteristics

1. Color(s): Brown

6. Texture (similar to)

☒ Wet Clay

7. Appearance

☒ Homogenous

9. Free Liquids (EPA SW 846, Method 9095)

☒ Not Present

☐ Present

2. Odor (none,mild,strong)

None

☐ Dry Clay

☐ Bilayered

10. Debris

☒ Not Present

11. Reactivity

☒ Not Reactive

Description of Odor:

☐ Sand

☐ Powder

☐ Other

☐ Multilayered

☐ Present

☐ Reactive

3. Moisture (wet,damp,dry)

Wet

8. Organic Vapors

☒ Not Present (< 1ppm) If present, identify compounds and amount in ppm on a wet basis.

12. Radionuclides (ASTM D5928-96)

☒ Not Detected

☐ Detected

Percent Solids: 20.3

4. pH

(EPA SW 846, method 9040/9045)

pH: 8.67 @ 19.5°C

5. Ignitability

(40 CFR §261.21)

☒ PASS

☐ FAIL

☒ Pass

☐ Fail

13. Cyanide Gas HCN

☒ Not Detected

☐ Detected \_\_\_\_\_ ppm

### C. Analytical Data

(Content on a dry weight basis in ppm or %)

Constituent *		Content	Qualifier	Constituent *		Content	Qualifier
1. Aluminum <sup>1</sup>	Al	7340.0 ppm	M3	19. Magnesium <sup>1</sup>	Mg	2080.0 ppm	
2. Antimony <sup>1,†</sup>	Sb	18.8 ppm		20. Manganese <sup>1</sup>	Mn	5160.0 ppm	
3. Arsenic <sup>1,†</sup>	As	48.5 ppm		21. Mercury <sup>1</sup>	Hg	< 5.8 ppm	M2
4. Barium <sup>1,†</sup>	Ba	96.2 ppm	M1	22. Nickel <sup>1,†</sup>	Ni	55100.0 ppm	M3
5. Beryllium <sup>1,†</sup>	Be	< 10.0 ppm		23. Selenium <sup>1,†</sup>	Se	< 50.0 ppm	
6. Bismuth <sup>1</sup>	Bi	101.0 ppm		24. Silver <sup>1,†</sup>	Ag	< 5.0 ppm	M1
7. Cadmium <sup>1,†</sup>	Cd	< 20.0 ppm		25. Thallium <sup>1,†</sup>	Tl	< 20.0 ppm	
8. Calcium <sup>1</sup>	Ca	13100.0 ppm		26. Tin <sup>1,†</sup>	Sn	< 100.0 ppm	
9. Chloride <sup>4</sup>	Cl <sup>-</sup>	0.17 %		27. Zinc <sup>1,†</sup>	Zn	786.0 ppm	
10. Chromium, Hexavalent <sup>2</sup>	Cr <sup>+6</sup>	3466.7 ppm		<div><b>* Analytical Procedure References</b><ol style="list-style-type: none"><li>EPA Method SW846 3050 / 6010 (Digestion / Analysis)</li><li>EPA Method SW846 3060 / 7196 (Extraction / Analysis)</li><li>EPA Method SW846 9010 / 9213 or 9014 (Distillation / Analysis)</li><li>HNO<sub>3</sub> or H<sub>2</sub>O<sub>2</sub> / EPA Method SW846 9056 (Digestion / Analysis)</li></ol><p>† Licensed Constituent</p></div>			
11. Chromium, Total <sup>1,†</sup>	Cr	47800.0 ppm	M1				
12. Cobalt <sup>1</sup>	Co	732.0 ppm					
13. Copper <sup>1,†</sup>	Cu	38400.0 ppm	M1				
14. Cyanide, Amenable <sup>3,†</sup>	CN <sup>-</sup>	not analyzed					
15. Cyanide, Total <sup>3,†</sup>	CN <sup>-</sup>	< 49.3 ppm					
16. Fluoride <sup>4</sup>	F <sup>-</sup>	0.74 %					
17. Iron <sup>1</sup>	Fe	249000.0 ppm	M2				
18. Lead <sup>1,†</sup>	Pb	82.7 ppm					

#### \* Analytical Procedure References

- EPA Method SW846 3050 / 6010 (Digestion / Analysis)
- EPA Method SW846 3060 / 7196 (Extraction / Analysis)
- EPA Method SW846 9010 / 9213 or 9014 (Distillation / Analysis)
- HNO<sub>3</sub> or H<sub>2</sub>O<sub>2</sub> / EPA Method SW846 9056 (Digestion / Analysis)

† Licensed Constituent

### D. Certification

I hereby certify that all information submitted in this profile is complete and accurate to the best of my knowledge and belief.

Signed: 

Date: 4/30/09

Title: Laboratory Manager

AZ DHS #: AZ0586

# World Resources Company

Form: FM-M01

## QA/QC DATA

**EXHIBIT A**

Generator Name: Alaskan Copper Works

Company I.D. #: 22149-001-01

QA/QC Criteria: All analyses met method criteria unless otherwise noted.

### Explanation of Data Qualifiers:

- M1 Matrix spike recovery was high; the associated blank spike recovery was acceptable.
- M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike recovery was acceptable.
- M2 Matrix spike recovery was low; the associated blank spike recovery was acceptable.

# World Resources Company

Form: FM-M01

## SAMPLE COLLECTION & ANALYSIS COMPLETION DATES

**EXHIBIT A**

Generator Name: Alaskan Copper Works

Company I.D. #: 22149-001-01

Constituent		Sample Date	Completion Date	Sample Technician
1. Aluminum	Al	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
2. Antimony	Sb	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
3. Arsenic	As	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
4. Barium	Ba	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
5. Beryllium	Be	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
6. Bismuth	Bi	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
7. Cadmium	Cd	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
8. Calcium	Ca	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
9. Chloride	Cl <sup>-</sup>	03/09/2009 12:25	03/18/2009 12:00	RUDY GARCIA
10. Chromium, Hexavalent	Cr <sup>+6</sup>	03/09/2009 12:25	04/28/2009 15:00	RUDY GARCIA
11. Chromium, Total	Cr	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
12. Cobalt	Co	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
13. Copper	Cu	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
14. Cyanide, Amenable	CN <sup>-</sup>			
15. Cyanide, Total	CN <sup>-</sup>	03/09/2009 12:25	03/17/2009 12:00	RUDY GARCIA
16. Fluoride	F <sup>-</sup>	03/09/2009 12:25	03/18/2009 12:00	RUDY GARCIA
17. Iron	Fe	03/09/2009 12:25	04/28/2009 14:17	RUDY GARCIA
18. Lead	Pb	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
19. Magnesium	Mg	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
20. Manganese	Mn	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
21. Mercury	Hg	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
22. Nickel	Ni	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
23. Selenium	Se	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
24. Silver	Ag	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
25. Thallium	Tl	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
26. Tin	Sn	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA
27. Zinc	Zn	03/09/2009 12:25	04/28/2009 11:48	RUDY GARCIA



## World Resources Company

8113 W. Sherman St  
Tolleson, AZ 85353-4025

Tel: 800.972.1955  
Fax: 623.936.9164

April 30, 2009

Mr. Gerald Thompson  
Environmental Assistant  
Alaskan Copper Works  
3200 Sixth Avenue South  
Seattle, WA 98124

Dear Mr. Thompson:

In accordance with the recycling Agreement with your company, World Resources Company (WRC) provides a "RECYCLABLE MATERIAL PROFILE" (RMP) each contract year. Enclosed, for your records, is a completed RMP for the material generated at your plant. If a qualifier is indicated on the RMP, WRC has provided a quality assurance/quality control case narrative to validate the constituent's result(s).

The concentration of metals reported on the RMP is the total concentration of each metal on a dry basis. The recyclable material is prepared for analysis by first grid-sampling and then drying the selected sample in the laboratory oven at 103°-105° centigrade in order to obtain a homogeneous dry sample (Standard Methods For The Examination of Water and Wastewater, 15th Edition, published by the American Public Health Association 1980, Method 209A "Total Residue at 103°-105° centigrade"). Therefore, these results are generally higher than the concentrations of your material as it leaves your facility. You should multiply these dry concentrations by the decimal form of your percent solids (i.e. 50.0% = 0.50) to obtain the concentration of your material as it leaves your plant.

WRC appreciates your business and looks forward to a long and mutually beneficial recycling relationship. Please feel free to call me at (800) 972-1955 with any questions you may have regarding the enclosed RMP. Thank you for your interest in recycling.

Sincerely,

World Resources Company

Jason Hensley  
Laboratory Manager

Enclosures